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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Andrea Allasia

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EXAMINER

NGUYEN, TOAN D

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,941	Applicant(s) ALLASIA ET AL.	
	Examiner TOAN D. NGUYEN	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 17-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 17, 24 and 25 are objected to because of the following informalities:

Claim 17, line 4, it is suggested to change "a failure in said associated transmission channel," to --- a failure in at least one of the associated transmission channels, ---.

Claim 17, line 5, it is suggested to change "the associated transmission channel" to --- the at least one of the associated transmission channels ---.

Claim 17, line 6, it is suggested to change "wherein the protection channel" to --- wherein at least one of the protection channels ---.

Claim 17, line 9, it is suggested to change "by the other of" to --- by another of ---.

Claim 17, line 11, it is suggested to change "said other of" to --- said another of --
-.

Claim 17, line 13, it is suggested to change "said other of" to --- said another of --
-.

Claim 24, line 6, it is suggested to change "a sub-network" to --- said sub-network
---.

Claim 25, line 4, it is suggested to change "said associated transmission channel" to --- the at least one of the associated transmission channels ---.

Claim 25, line 5, it is suggested to change "wherein the protection channel" to --- wherein at least one of the protection channels ---.

Claim 25, line 8, it is suggested to change "by the other of" to --- by another of ---.

Claim 25, line 10, it is suggested to change "said other of" to --- said another of --
-.

Claim 25, line 12, it is suggested to change "said other of" to --- said another of --
-.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 17-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platenberg et al. (US 7,127,669) in view of Weis (US 6,714,518).

For claims 17-19 and 21-24, Platenberg et al. disclose redundant path communication methods and systems comprising at least two protection channels (figure 2, A-Standby 102 (c) and B-Standby 102 (d), col. 5, lines 20-21) associated to respective transmission channels, each of said at least two protection channels admitting an active state for carrying (figure 2, A-Active 102 (a)), in the presence of a failure (figure 5, B-Active 102(b)) in said associated transmission channel (col. 8, lines 36-39), traffic to be carried by the associated transmission channel and a stand-by state (figure 5, A-Standby 102 (c) and B-Standby 102 (d)), wherein the protection channel is adapted to carry extra traffic, comprising a step of running said at least two protection channels (figure 5, A-Standby and B-Standby means), whereby one of said at least two protection channels in said stand-by state (figure 5, A-Standby 102 (c)) is adapted to ensure recovery of extra traffic carried (col. 8, lines 61-63) by the other of said at least two protection channels while one of the following conditions is met:

said other of said at least two protection channels is switched to said active state (figure 5, 102(d) standby state switched to active state means), and said other of said at least two protection channels is subject to failure (col. 8, lines 36-42).

However, Platenberg et al. do not expressly disclose a sub-network connection protection scheme. In an analogous art, Weis discloses a sub-network connection protection scheme col. 4, lines 22-23).

Weis discloses comprising the steps of associating to each of said at least two protection channels corresponding input and output digital cross connects; and running said sub-network connection protection scheme at said input and output digital cross connects (figure 2, col. 4, lines 4-5 as set forth in claim 18); comprising the steps of associating to each of said at least two protection channels corresponding input and output add-drop multiplexers; and running said sub-network connection protection scheme at said input and output add-drop multiplexers (figure 2, col. 4, lines 4-5 as set forth in claim 19); providing in said communication network a plurality of ring structures and the step of associating said at least two protection channels to two respective different rings of said plurality of rings (col. 3, lines 6-9 as set forth in claim 21); selecting said two different rings as rings belonging to the same class of rings (col. 3, lines 6-9 as set forth in claim 22); selecting said two different rings as rings belonging to different classes of rings (col. 3, lines 6-9 as set forth in claim 23); and providing non-preemptible unprotected traffic carried on non-preemptible channels in said network as well as non-preemptible channels protected by a sub-network connection protection scheme, wherein said extra traffic is ensured an intermediate level of availability between the levels of protection provided by said non-preemptible channels and by said non-preemptible channels protected by a sub-network connection protection scheme (col. 4, lines 22-40 as set forth in claim 24).

One skilled in the art would have recognized the sub-network connection protection scheme, and would have applied Weis' subnetwork connection protection (SNCP) in Platenberg et al.'s network 100. Therefore, it would have been obvious to

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one of ordinary skill in the art at the time of the invention, to use Weis' method for setting up a connection in a synchronous digital telecommunications network and network element in Platenberg et al.'s redundant path communication methods and systems with the motivation being to provide pointers between their respective endpoints in the graphs (col. 4, lines 22-24).

For claim 20, Platenberg et al. disclose comprising the step of providing in said communication network at least one ring structure including non-coextensive paths and the step of associating said at least two protecting channels to respective non-coextensive paths in said ring (figure 2, col. 6, lines 9-15).

For claims 25-27 and 29-31, Platenberg et al. disclose redundant path communication methods and systems comprising at least two protection channels (figure 2, A-Standby 102 (c) and B-Standby 102 (d), col. 5, lines 20-21) associated to respective transmission channels, each of said at least two protection channels admitting an active state for carrying (figure 2, A-Active 102 (a)), in the presence of a failure (figure 5, B-Active 102(b)) in said associated transmission channel (col. 8, lines 36-39), traffic to be carried by the associated transmission channel and a stand-by state (figure 5, A-Standby 102 (c) and B-Standby 102 (d)), wherein the protection channel is adapted to carry extra traffic, said at least two protection channels jointly defining a network connection protection scheme (figure 2, col. 6, lines 9-15), whereby one of said at least two protection channels in said stand-by state (figure 5, A-Standby 102 (c)) is adapted to ensure recovery of extra traffic carried (col. 8, lines 61-63) by the other of said at least two protection channels while one of the following conditions is met:

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said other of said at least two protection channels is switched to said active state (figure 5, 102(d) standby state switched to active state means), and said other of said at least two protection channels is subject to failure (col. 8, lines 36-42).

However, Platenberg et al. do not expressly disclose a sub-network connection protection scheme. In an analogous art, Weis discloses a sub-network connection protection scheme (col. 4, lines 22-23).

Weis discloses corresponding input and output digital cross connects associated to each of said at least two protection channels and wherein said input and output digital cross connects jointly define said sub-network connection protection scheme (figure 2, col. 4, lines 4-5 as set forth in claim 26); corresponding input and output add-drop multiplexers associated to each of said at least two protection channels and wherein said input and output add-drop multiplexers jointly define said sub-network connection protection scheme (figure 2, col. 4, lines 4-5 as set forth in claim 27); a plurality of ring structures and wherein said at least two protection channels are associated to two respective different rings of said plurality of rings (col. 3, lines 6-9 as set forth in claim 29); wherein said two different rings belong to the same class (col. 3, lines 6-9 as set forth in claim 30); and wherein said two different rings belong to different ring classes (col. 3, lines 6-13 as set forth in claim 31).

One skilled in the art would have recognized the sub-network connection protection scheme, and would have applied Weis' subnetwork connection protection (SNCP) in Platenberg et al.'s network 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Weis' method for

setting up a connection in a synchronous digital telecommunications network and network element in Platenberg et al.'s redundant path communication methods and systems with the motivation being to provide pointers between their respective endpoints in the graphs (col. 4, lines 22-24).

For claim 28, Platenberg et al. disclose comprising at least one ring structure including non-coextensive paths and wherein said at least two protecting channels are associated to respective non-coextensive paths in said ring (figure 2, col. 6, lines 9-15).

For claim 32, Platenberg et al. disclose a computer program product capable of being loaded into a memory of at least one computer, the computer program product including software code portions for performing the steps of the method of any one of claims 17 to 24 (col. 18, lines 40-43).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOAN D. NGUYEN whose telephone number is (571)272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D. N./
Examiner, Art Unit 2416

/William Trost/
Supervisory Patent Examiner, Art Unit 2416